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Exhibit R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Defense Message System/DM01	10.966	11.446	10.170	6.640	6.366	6.652	6.757	6.926

A. Mission Description and Budget Item Justification:
The Defense Message System (DMS) is the Warfighter's Message System. The Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, ASD (C3I), directed one seamless, end-to-end global electronic organizational messaging service within DOD. The DMS Program was established in response to Joint Staff validated messaging requirements for an integrated common user writer-to-reader capable organizational messaging service that is accessible from world-wide DOD locations, tactically deployed users, and other designated Federal Government users, with interfaces to Allied users and Defense contractors. As a value-added service of the Global Information Grid (GIG), the DMS incorporates state-of-the-art messaging, directory, security, and management technologies to provide those capabilities needed to support the GIG objective goals. In FY02, DMS operationally tested and fielded Release 3.0, which focused on essential Intelligence Community requirements and provided automated access controls for compartments, code words and caveats using Allied Communications Protocol (ACP) 120 implementation of the Common Security Protocol (CSP). In FY03, DMS will field a Release 3.0 Maintenance Release, which will provide critical enhancements and increased robustness to the organizational messaging capabilities provided in Release 3.0. These will include support for new commercial operating systems (with their increased emphasis on security), support for the latest versions of anti-virus software and the latest security configuration guidance, commercial refresh to the latest version of client software, enhanced user ability to track the status of sent messages, support for new forms of Fortezza tokens to improve scalability, improvements in directory security, and enhanced tools capabilities to facilitate system management/administration. The DMS Program will also begin the development process of the next Release 3.0 maintenance release during FY03 for fielding in FY04. This maintenance release will provide similar improvements resulting from commercial refresh (of both operating systems and applications software), and usability improvements resulting from lessons learned. As a result of Milestone Decision Authority (MDA) direction, DISA/DMS has reprioritized program activities to focus on timely development and implementation of Directory Security Enhancements as mandated by OSD. Similar areas of lessons learned, usability, commercial product sustainability/refresh, and security improvements will form the basis of additional maintenance releases which will undergo development during FY04 for fielding in FY05. DMS will support closure of the DMS Transition Hubs (DTHs) in FY03. OSD has directed that the Services, in coordination with DISA, plan for a full and

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seamless tactical and strategic DMS implementation, to include the intelligence community, the nuclear C3 community, and allied communities. Tactical/deployable DMS units (first fielded in FY 2001) will be implemented sufficiently for closure of all DTHs by the end of FY 2003. The security portion of the DMS RDT&E budget is within PE 0303140K and is explained in a separate budget exhibit. The funds in PE 0303140K are not duplication of effort since DMS has significant security components. PE 0303140K, which contains DISA's information assurance funds, pays for the security components of DMS. This DMS program element is under Budget Activity 5 because it involves the development of major upgrades increasing existing system performance.

Accomplishments/Planned Program:

	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>
Subtotal Cost	4.687	6.274	9.853	6.177

RDT&E dollars will support basic Systems Engineering activities of both the PMO (including contractor support) and the Prime Integrator, as are critical to completion of worldwide fielding and sustainment of DMS. The supported tasks include Program and Systems Management to conduct technical assessments/analyses of existing requirements and recommended solutions; and development of new end to end configuration management products (Non-Core Products) that are identified and embraced by the user community which then must be tested and integrated with the existing DMS System. During FY02 through FY05, the Prime Contractor implements and fields system capabilities through a series of coordinated Product and Maintenance Releases. FY03 funds deliver and support fielding the first Release 3.0 maintenance release and support closure of the DMS Transition Hubs (DTHs). DMS Release 3.0 maintenance release will provide additional critical enhancements to the organizational messaging capabilities provided in Release 3.0. This basic core of activity upgrades will keep the current DMS high grade system up to date with technology, minimize any further divergence from COTS, and provide the basis for full Intelligence Community (IC) and tactical implementation, final AUTODIN closure, Allied interoperability, and transition to Next Generation Messaging. System Security enhancements shall also be provided, per OSD guidance contained in the DMS Milestone III (GENSER) decision memorandum.

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Subtotal Cost		<u>FY 02</u> 2.503	<u>FY 03</u> 2.463	<u>FY 04</u> 0.317	<u>FY 05</u> 0.463			
<p>DMS Release 3.0 Maintenance Releases (MRs) will provide the post-development software and hardware refreshes and upgrades to support DMS sustainment throughout the years. The first Maintenance Release delivered in FY2003, provides additional security features for organizational messaging through Top Secret/SCI and protection from evolving information warfare threats. Follow-on Maintenance Releases will provide enhancements and robustness to security features and organizational messaging, per OSD guidance contained in the DMS Milestone III (GENSER) decision memorandum. MRs will also provide for engineering and integration of security, interoperability, and communications support capabilities and functionality that are unique to DMS operation in the Intelligence Community (IC) and tactical environments. Areas of focus for the IC are directory strong authentication and additional legacy translation support. Areas of focus for tactical use of DMS include operation in limited bandwidth environments, support for broadcast mode protocols, and support for connectionless mode transport in the messaging application.</p>								
Subtotal Cost		<u>FY 02</u> 3.659	<u>FY 03</u> 2.709	<u>FY 04</u> 0.000	<u>FY 05</u> 0.000			
<p>The Joint Interoperability Test Command (JITC) provides DMS integration test support for all new DMS releases, including correction of problems associated with system capability. Each DMS release contains both Information Assurance and non-IA functionality, and as such, portions of the Developmental Testing involve testing of functionality specifically geared to information security/assurance. Problems found during testing may result in "fixes" in the form of Problem Trouble Reports (PTRs), Information Assurance Vulnerability Alerts (IAVAs), etc, any of which may pertain to information security/assurance. In addition, JITC provides on-site development testing in preparation for operational test, and participates in operational assessment or formal operational test of each DMS release. Over the period FY02-FY03,</p>								

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RDT&E dollars are programmed to provide testing support to include Development Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E), test equipment, Information Assurance Vulnerability Alerts (IAVA) and development of security products and measures (including Virtual Private Network (VPN) and/or directory strong authentication), to protect DMS against a variety of system vulnerabilities. Such measures are necessary to support validated Multicommand Required Operational Capability (MROC) requirements and insure transition of the IC away from AUTODIN. In addition, Non-Core Security Product, will support interoperability with Allied and non-DoD organizations in the post DTH closure environment, and increase interoperability with the Intelligence Community. DMS will support a series of security tests and develop plans of action to address security risks as security threats change. In FY04 and FY05, DMS must develop a process and provide a plan of action that addresses implementation of any NSA recommended security enhancements as a result of an ASD(C3I) mandated security assessment. DMS will continue to support a series of security tests and development plans of action to address security risks which will be performed by JITC. Therefore, this task will be funded with Information System Security Program (PE 0303140K) funds.								
Subtotal Cost		<u>FY 02</u> 0.078	<u>FY 03</u> 0.000	<u>FY 04</u> 0.000	<u>FY 05</u> 0.000			
RDT&E dollars supported Service/Agency DMS implementations/transition, as required, but primarily for tactical and IC, for AUTODIN closure, thereby reducing the risk to a high risk DTH closure schedule and assist in the definition of performance improvements needed by users to further stabilize implementation. In FY03, the responsibility for funding this task will shift from DISA/DMS to the Services and Agencies.								
Subtotal Cost		<u>FY 02</u> 0.039	<u>FY 03</u> 0.000	<u>FY 04</u> 0.000	<u>FY 05</u> 0.000			
The Management Workstation (MWS) provides DMS system/component management capability for System Administrators. During FY02, RDT&E dollars supported MWS software upgrades and refreshes that provided the necessary usability updates and fixes to system software problems. As new maintenance releases are fielded, the DMS products must be upgraded to support complex DMS security features that support sustainable operational use of the system. The MWS replacement								

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functionality is nearing completion and delivery for implementation. Continuing product updates will occur as part of the total maintenance release effort.											
B. <u>Program Change Summary:</u>											
	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>							
Previous President's Budget	11.297	11.803	14.199	14.584							
Current President's Budget	10.966	11.446	10.170	6.640							
Total Adjustments	-.331	-.357	-4.029	-7.944							
Change Summary Explanation:											
FY 02 adjustment due to below threshold reprogramming.											
FY 03 change due to undistributed congressional adjustments to the Defense-wide RDT&E appropriation.											
FY04 - FY05: With approval of Milestone III for the GENSER community, the DMS program has begun transition from acquisition/development to sustainment. Consequently, this submission has realigned total program controls to reflect more O&M funding, and less RDT&E funding. While RDT&E funding is still needed for remaining development activities associated with Intelligence Community requirements, the functionality now in full fielding (to the GENSER community) is in a operations and maintenance mode. Future functionality/program activities associated with sustainment of existing product capabilities will be funded in the O&M appropriation; engineering, development, and test activities associated with enhanced system capabilities will be funded in the RDT&E appropriation.											
C. <u>Other Program Funding Summary:</u>											
	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	<u>FY 08</u>	<u>FY 09</u>	<u>Complete</u>	To	Total
Procurement, DW	13.711	18.565	5.277	4.271	4.788	3.755	3.764	3.773	Contg	Cost	
O&M, DW	9.166	8.424	24.317	28.267	25.770	24.220	22.262	23.196	Contg	Contg	
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<p>D. <u>Acquisition Strategy</u>: The overall strategy is based upon the fundamental premise that COTS products will continue their evolution through the constant refresh of commercial technology. To maintain an interoperable system, DMS will continue to use a single contractor as an overall integrator. Contract Administration is under a fee for service arrangement by the DMS Contracting Office, which is based at Maxwell Air Force Base (MAFB)-Gunter Annex, Alabama (AL).</p> <p>Additionally, DMS utilizes contract vehicles within DISA to acquire other equipment and services to support the implementation of DMS such as the Next Generation Contract. All contracts have been competitively awarded and provide support in the following areas: program planning and control; analytic services of the DMS system integration; organizational messaging; tactical deployment; operations; configuration management; and training and logistics. These contracts also provide support for fielding of Virtual Private Networking (VPN) technology that will protect the DMS backbone.</p> <p>The DMS employs several strategies for the acquisition of products and services:</p> <p>a. Ordering of DMS hardware, software, integration, engineering and technical services from the DMS LMC contract.</p> <p>b. Standard commercial products and services required to accomplish DMS implementation are bought via existing GSA Schedule or other high volume/ID-IQ contract vehicles. Specialized security products (such as High Assurance Guard [HAG] and Certificate Authority Workstation [CAW]) are provided by NSA and incorporated as Government Furnished Equipment (GFE) by the integrator.</p> <p>c. MITRE as a Federally Funded Research and Development Center (FFRDC) provides systems engineering and integration support for the DMS community, applying engineering discipline and principles to DMS in function areas of system architecture, technical strategy, program strategy, and program execution.</p>								
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Exhibit R-3 Cost Analysis										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT					PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/05		Defense Message System (DMS)/PE 0303129K					Defense Message System/DM01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Product Development Systems Engineering and Integration	CPFF, FFP/ Comp	Lockheed Martin, Company Manassas, VA	6.529	4.948	05/03	7.009	05/04	5.152	05/05	0	23.638	23.638
Systems Integration	CPAF/ SS	Data Systems Analysts Fairfax, VA	0.850	0	N/A	0	N/A	0	N/A	0	0.850	0.850
Systems Engineering	CPAF/ SS	Data Systems Analysts Fairfax, VA	3.238	1.061	02/03	0.486	02/04	0.450	02/05	0	5.235	5.235
	FFRDC	MITRE, Arlington, VA	2.703	0.482	10/02	2.009	10/03	0.663	10/04	0	5.857	5.857
	CPFF/ Comp	Booz, Allen & Hamilton, McLean, VA	2.426	0.785	11/02	0	N/A	0	N/A	0	3.211	3.211
	CPFF/ SS	Getronics, Alexandria, VA	0.324	0	N/A	0	N/A	0	N/A	0	0.324	0.324
	CPFF/ Comp	SETA, McLean, VA	1.258	0	N/A	0	N/A	0	N/A	0	1.258	1.258
	FFP SS	TELOS Ashburn, VA	0	0.855	02/03	0.666	02/04	0.375	02/05	0	1.896	1.896
	TM Comp	SRA Arlington, VA	0	0.665	02/03	0	N/A	0	N/A	0	0.665	0.665
	CPFF SS	NAVSEA Laurel, MD	0	0.195	01/03	0	N/A	0	N/A	0	0.195	0.195
Subtotal Product Development			17.328	8.991		10.170		6.640				

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APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT					PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/05			Defense Message System (DMS)/PE 0303129K					Defense Message System/DM01				
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	MIPR	Joint Inter-Operability Test Command, Indian Head, MD	3.350	1.190	10/02	0	N/A	0	N/A	0	4.540	4.540
	CPAF/SS	Data Systems Analysts Fairfax, VA	0.829	0.741	04/03	0	N/A	0	N/A	0	1.570	1.570
Tactical Testing	MIPR/ARMY	Executive Agent Tactical Switch Systems	0.538	0.314	10/02	0	N/A	0	N/A	0	0.852	0.852
Operational Test & Evaluation	MIPR	Joint Inter-Operability Test Command, Ft Huachuca, AZ	0	0.210	10/02	0	N/A	0	N/A	0	0.210	0.210
Subtotal Test and Evaluation			4.717	2.455		0		0				
TOTAL			22.045	11.446		10.170		6.640				

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Exhibit R-4 Schedule Profile																		Date: February 2003																	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense -Wide/05										Program Element Number and Name Defense Message System PE 0303129K										Project Number and Name DMS/DM01															
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Delivery 3.0 Gold to JITC and Test	△	△																																	
Begin Dvlpmnt of 3.0/ MR1	△	△																																	
3.0 Gold Operational Test			△																																
Expand Medium Grade Services			△				△				△				△				△				△			△				△					
Begin Dvlpmnt of 3.0/ MR2 – MR8				△	△			△	△			△	△			△	△			△	△			△	△			△	△						
Begin Dvlpmnt of 3.0/ MR9																															△				
Closure of DMS Transition Hubs (DTH)						△	△	△	△																										

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Exhibit R-4 Schedule Profile																Date: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense -Wide/05								Program Element Number and Name Defense Message System PE 0303129K								Project Number and Name DMS/DM01																
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Begin Dvlpmnt Test of 3.0/MR1 – MR8				△				△				△				△				△				△				△				
3.0/MR1-MR7 Operational Test		△	△					△		△	△			△	△			△	△					△	△			△	△			

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Exhibit R-4a Schedule Detail						DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/05		Defense Message System PE 0303129K			DMS/DM01			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Delivery 3.0 Gold to JITC and Test	1Q - 2Q							
Begin Dvlpmt of 3.0/ MR1	1Q - 2Q							
3.0 Gold Operational Test	3Q							
Expand Medium Grade Services	3Q	3Q	3Q	3Q	3Q	3Q	3Q	3Q
Begin dvlpmt of 3.0/ *MR2 - MR8	4Q	*1Q & 4Q	*1Q & 4Q	1Q & 4Q	1Q & 4Q	1Q & 4Q	1Q & 4Q	1Q & 4Q
Begin dvlpmt of 3.0/ MR9								4Q
Closure of DMS Transition Hubs (DTHs)		2Q - 4Q	1Q					
Begin Dvlpmt Test of 3.0/MR1 - MR8	4Q	4Q	4Q	4Q	4Q	4Q	4Q	4Q
3.0/MR1-MR7 Operational Test	2Q - 3Q	4Q	2Q - 3Q	2Q - 3Q	2Q - 3Q	2Q - 3Q	2Q - 3Q	2Q - 3Q
* - FY2003-2004: Specifically Directory Security Enhancements								
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